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(FILE 'CAPLUS' ENTERED AT 12:26:22 ON 23 JAN 2004)
DEL HIS

FILE 'USPATFULL' ENTERED AT 12:38:05 ON 23 JAN 2004
L1 0 S PHARMACEUTICAL(3W)KIT#/IA
L2 3052 S PHARMACEUTICAL(3W)KIT#
L3 1 S STOLL, ANDREW/IN
L4 1 S US6344482/PN

FILE 'WPIDS' ENTERED AT 12:41:38 ON 23 JAN 2004
L5 1 S WO9739759/PN

L5 ANSWER 1 OF 1 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
ACCESSION NUMBER: 1997-535573 [49] WPIDS
CROSS REFERENCE: 2003-362085 [34]
DOC. NO. CPI: C1997-171219
TITLE: Treatment of bipolar disorder uses omega-3 fatty acids and phosphatidyl-choline - preferably eicosapentanoic acid or docosahexanoic acid or glycerol esterified with omega-3 acids and phosphocholine.
DERWENT CLASS: B05
INVENTOR(S): SEVERUS, W E; STOLL, A L
PATENT ASSIGNEE(S): (BGHM) BRIGHAM & WOMENS HOSPITAL; (SEVE-I) SEVERUS W E; (STOL-I) STOLL A L
COUNTRY COUNT: 21
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG	MAIN IPC
WO 9739759	A2	19971030	(199749)*	EN	13	A61K033-14 <--
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE						
W: AU CA JP US						
AU 9727384	A	19971112	(199811)			A61K033-14
US 6344482	B1	20020205	(200211)			A61K031-20
US 2002091103	A1	20020711	(200248)			A61K031-685

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 9739759	A2		WO 1997-US6712	19970423
AU 9727384	A		AU 1997-27384	19970423
US 6344482	B1		WO 1997-US6712	19970423
			US 1999-269361	19990322
US 2002091103	A1	Cont of	US 1999-269361	19990322
			US 2002-68035	20020205

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9727384	A	Based on	WO 9739759
US 6344482	B1	Based on	WO 9739759

PRIORITY APPLN. INFO: US 1996-16140P 19960424; US 1999-269361 19990322
REFERENCE PATENTS: No-SR.Pub

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INT. PATENT CLASSIF.:
MAIN: A61K031-20; A61K031-685; A61K033-14
SECONDARY: A61K031-14; A61K031-203; A61K031-66; A61K033-00
BASIC ABSTRACT:
WO 9739759 A UPAB: 20030529
Treatment for bipolar disorder comprises administration of an Omega -3 fatty acid in sufficient dosage to reduce or eliminate symptoms. Also claimed are: (i) an Omega -3 phosphatidylcholine, used in the treatment of bipolar disorders, comprising of glycerol, where: (a) the alpha and beta carbons of the glycerol are both esterified to a fatty acid, at least one of which is an Omega -3 fatty acid; and (b) the gamma carbon of the glycerol is esterified to phosphocholine; and (b) a kit comprising a first component containing an Omega -3 fatty acid, and a second component containing an agent used in the treatment of bipolar disorders.
USE - The treatment is used to reduce or eliminate the symptoms of bipolar disorder (claimed). The Omega -3 fatty acids or Omega -3 phosphatidyl cholines are administered to bipolar patients in increasing doses until maximum benefit is achieved, preferably orally. Parenteral, transdermal, sublingual, or buccal administration is possible, or implantation.
ADVANTAGE - Omega -3 fatty acids inhibit thrombosis and platelet aggregation and can lower blood pressure. The Omega -3 phosphatidylcholines produce the same effect as lecithin due to the release of free choline, but reduce rather than increase risks of cardiovascular disease.
Dwg.0/0
FILE SEGMENT: CPI
FIELD AVAILABILITY: AB; DCN
MANUAL CODES: CPI: B05-B01P; B10-C04E; B10-G02; B14-F02A; B14-F04

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(FILE 'USPATFULL' ENTERED AT 06:18:21 ON 26 JAN 2004)
DEL HIS
L1 118576 S DEPRESSION
L2 1158 S (OMEGA(2W)(FATTY ACID#))
L3 7717 S PHOSPHATIDYLCHOLINE
L4 18 S L1 AND L2 AND L3
L5 8 S (OMEGA(3W)PHOSPHATIDYLCHOLINE#)
L6 3 S L1 AND L5

L6 ANSWER 1 OF 3 USPATFULL on STN
ACCESSION NUMBER: 2003:17078 USPATFULL
TITLE: Omega-3 fatty acids in the treatment of **depression**
INVENTOR(S): Stoll, Andrew, Lincoln, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003012827	A1	20030116
APPLICATION INFO.:	US 2002-83913	A1	20020227 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-269361, filed on 22 Mar 1999, GRANTED, Pat. No. US 6344482 A 371 of International Ser. No. WO 1997-US6712, filed on 23 Apr 1997, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Choate, Hall & Stewart, Exchange Place, 53 State

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Street, Boston, MA, 02109
NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
LINE COUNT: 617
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a method of treating patients with major **depression** by administering omega-3 fatty acids. These may be administered in a substantially purified form, as part of a pharmaceutical composition, or as part of a larger molecule, e.g., a triacylglycerol, which releases free fatty acid after ingestion by a patient.

The present invention is also directed to triacylglycerols which are esterified at the gamma cardon of glycerol to phosphocholine and at either the alpha or beta carbon of glycerol to an omega-3 fatty acid. These "omega-3 phoshatidylcholines" are also used in the treatment of patients with major **depression**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CLM What is claimed is:

1. A method of treating a human patient for unipolar major **depression**, comprising administering an omega-3 fatty acid to said patient at a dosage sufficient to reduce or eliminate the symptoms of unipolar major **depression**.

2. The method of claim 1, wherein said omega-3 fatty acid is administered at a dose of between about 1 and about 30 grams per day.

3. The method of claim 1, wherein said omega-3 fatty acid is in a substantially pure form.

4. The method of claim 1, wherein said omega-3 fatty acid is eicosapentanoic acid.

5. The method of claim 4, wherein said eicosapentanoic acid is administered at a dose of between about 2 and about 10 grams per day.

6. The method of claim 1, wherein said omega-3 fatty acid is docosahexanoic acid.

7. The method of claim 6, wherein said docosahexanoic acid is administered at a dose of between about 1 and about 5 grams per day.

8. The method of claim 1, wherein said omega-3 fatty acid is alpha-linolenic acid.

9. The method of claim 1, further comprising administering a pharmaceutically effective dose of at least one member of lithium, a pharmaceutical antidepressant, an herbal antidepressant, an anticonvulsant, a mood stabilizer, an antipsychotic agent, and a benzodiazepine.

10. An **omega**-3 **phosphatidylcholine** useful in the treatment of unipolar major **depression** consisting of glycerol, wherein: a) the .alpha. and .beta. carbons of said glycerol are both esterified to a fatty acid, at least one of which is an omega-3 fatty acid; and b) the .gamma. carbon of said glycerol is esterified to phosphocholine.

11. The **omega**-3 **phosphatidylcholine** of claim 10, wherein both the .alpha. and .beta. carbons of said glycerol are

esterified to an omega-3 fatty acid.

12. The **omega**-3 **phosphatidylcholine** of either claim 10 or 11, wherein eicosapentanoic acid is esterified to a member of the .alpha. carbon, the .beta. carbon, and both the .alpha. and .beta. carbons of said glycerol.

13. The **omega**-3 **phosphatidylcholine** of either claim 10 or 11, wherein docosahexanoic acid is esterified to a member of the .alpha. carbon, the .beta. carbon, and both the .alpha. and .beta. carbons of said glycerol.

14. The **omega**-3 **phosphatidylcholine** of either claim 10 or 11, wherein alpha-linolenic acid is esterified to a member of the .alpha. carbon, the .beta. carbon, and both the .alpha. and .beta. carbons of said glycerol.

15. The **omega**-3 **phosphatidylcholine** of claim 10, wherein eicosapentanoic acid is esterified to the .alpha. carbon of said glycerol and docosahexanoic acid is esterified to the .beta. carbon of said glycerol.

16. The **omega**-3 **phosphatidylcholine** of claim 10, wherein docosahexanoic acid is esterified to the .alpha.carbon of said glycerol and eicosapentanoic acid is esterified to the .beta. carbon of said **omega**-3 **phosphatidylcholine**.

17. A pharmaceutical composition comprising the **omega**-3 **phosphatidylcholine** of claim 10, wherein one or more unit doses of said composition provides an amount of said **omega**-3 **phosphatidylcholine** sufficient to reduce or eliminate the symptoms of unipolar major **depression**.

18. The pharmaceutical composition of claim 16, further comprising a member of lithium, a pharmaceutical antidepressant, an herbal antidepressant, an anticonvulsant, a mood stabilizer, an antipsychotic agent, and a benzodiazepine.

19. A method of treating unipolar major **depression** in a human patient, comprising administering the **omega**-3 **phosphatidylcholine** of claim 10 to said patient at a dose sufficient to reduce or eliminate the symptoms of unipolar major **depression**.

20. The method of claim 19, further comprising administering a pharmaceutically effective dose of at least one member of lithium, a pharmaceutical antidepressant, an herbal antidepressant, an anticonvulsant, a mood stabilizer, an antipsychotic agent, and a benzodiazepine.

21. A kit comprising a carrier containing in close confinement therein one or more components, wherein: a) a first component contains an omega-3 fatty acid; and b) a second component contains a psychotropic medication useful in the treatment of unipolar major **depression**
.

22. The kit of claim 21 wherein: a) said first component contains an omega-3 fatty acid selected from the group consisting of eicosapentanoic acid, docosahexanoic acid, and alpha-linolenic acid; and b) said second component is selected from the group consisting of lithium, pharmaceutical antidepressant, an herbal antidepressant, an

anticonvulsant, a mood stabilizer, an antipsychotic agent, and a benzodiazepine.

23. A kit comprising a carrier containing in close confinement therein, none or more components wherein: a) a first component contains an omega-3 phosphatidyl-choline; and b) a second component contains a psychotropic agent useful in the treatment of unipolar major **depression**.

24. The kit of claim 23, wherein the .alpha. carbon of said glycerol is esterified to eicosapentanoic acid and the .beta. carbon of said glycerol is a esterified to doocosa-hexanoic acid.

25. The kit of claim 23, wherein the .alpha. carbon of said glycerol is esterified to docosahexanoic acid and the .beta. carbon of said glycerol is a esterified to eicosapentanoic acid.

26. The kit of claim 23, wherein a member of eicosapentanoic acid, docosapentanoic acid, and alpha-linolenic acid is esterified to a member of the .alpha. carbon, the .beta. carbon, and both the .alpha. and .beta. carbons of said glycerol.

27. The kit of any one of claims 23-26, wherein said second component is selected from the group consisting of lithium, pharmaceutical antidepressant, an herbal antidepressant, an anticonvulsant, a mood stabilizer, an antipsychotic agent, and a benzodiazepine.

L6 ANSWER 2 OF 3 USPATFULL on STN

ACCESSION NUMBER:	2002:172346 USPATFULL
TITLE:	Omega-3 fatty acids and **omega**-3 **phosphatidylcholine** in the treatment of bipolar disorder
INVENTOR(S):	Stoll, Andrew L., Lincoln, MA, UNITED STATES Severus, Wolfram E., Berlin, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002091103	A1	20020711
APPLICATION INFO.:	US 2002-68035	A1	20020205 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1999-269361, filed on 22 Mar 1999, PATENTED		

	NUMBER	DATE
PRIORITY INFORMATION:	WO 1997-US6712	19970423

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Choate, Hall & Stewart, Exchange Place, 53 State Street, Boston, MA, 02109
NUMBER OF CLAIMS:	25
EXEMPLARY CLAIM:	1
LINE COUNT:	439

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a method of treating patients with bipolar disorder by administering omega-3 fatty acids. These may be administered in a substantially purified form, as part of a pharmaceutical composition, or as part of a larger molecule, e.g. a triacylglycerol, which releases free fatty acid after ingestion by a patient.

The present invention is also directed to triacylglycerols which are esterified at the gamma carbon of glycerol to phosphocholine and at either the alpha or beta carbon of glycerol to an omega-3 fatty acid. These "omega-3 phoshatidylcholines" are also used in the treatment of patients with bipolar disorder.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CLM What is claimed is:

1. A method of treating a human patient for bipolar disorder, comprising administering an omega-3 fatty acid to said patient at a dosage sufficient to reduce or eliminate the symptoms of said disorder.

2. The method of claim 1, wherein said omega-3 fatty acid is administered at a dose of between about 1 and about 30 grams per day.

3. The method of claim 1, wherein said omega-3 fatty acid is in a substantially pure form.

4. The method of claim 1, wherein said omega-3 fatty acid is eicosapentanoic acid.

5. The method of claim 4, wherein said eicosapentanoic acid is administered at a dose of between about 2 and about 10 grams per day.

6. The method of claim 1, wherein said omega-3 fatty acid is docosahexanoic acid.

7. The method of claim 6, wherein said docosahexanoic acid is administered at a dose of between about 1 and about 5 grams per day.

8. The method of claim 1, further comprising administering a source of lithium to said patient at a dose sufficient to reduce or eliminate the symptoms of said disorder.

9. The method of claim 1, further comprising administering a source of choline to said patient at a dose effective at reducing or eliminating the symptoms of said disorder.

10. An **omega**-3 **phosphatidylcholine** useful in the treatment of bipolar disorder consisting of glycerol, wherein: a) the .alpha. and .beta. carbons of said glycerol are both esterified to a fatty acid, at least one of which is an omega-3 fatty acid; and b) the .gamma. carbon of said glycerol is esterified to phosphocholine.

11. The **omega**-3 **phosphatidylcholine** of claim 10, wherein both the .alpha. and .beta. carbons of said glycerol are esterified to an omega-3 fatty acid.

12. The **omega**-3 **phosphatidylcholines** of either claim 10 or 11, wherein eicosapentanoic acid is esterified to either the .alpha. or .beta. carbon of said glycerol.

13. The **omega**-3 **phosphatidylcholine** of either claim 10 or 11, wherein docosahexanoic acid is esterified to either the .alpha. or .beta. carbon of said glycerol.

14. The **omega**-3 **phosphatidylcholine** of claim 10, wherein eicosapentanoic acid is esterified to the .alpha. carbon of said glycerol and docosahexanoic acid is esterified to the .beta. carbon of said glycerol.

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15. The **omega**-3 **phosphatidylcholine** of claim 10, wherein docosahexanoic acid is esterified to the .alpha. carbon of said glycerol and eicosapentanoic acid is esterified to the .beta. carbon of said **omega**-3 **phosphatidylcholines**.

16. A pharmaceutical composition comprising the **omega**-3 **phosphatidylcholine** of claim 10, wherein one or more unit doses of said composition provides an amount of said **omega**-3 **phosphatidylcholine** sufficient to reduce or eliminate the symptoms of said bipolar disorder.

17. The pharmaceutical composition of claim 16, further comprising a source of lithium.

18. A method of treating bipolar disorder in a human patient, comprising administering the omega-3 phosphatidyicholine of claim 10 to said patient at a dose sufficient to reduce or eliminate the symptoms of said disorder.

19. The method of claim 18, further comprising administering a source of lithium to said patient at a dosage sufficient to reduce or eliminate the symptoms of said disorder.

20. A kit comprising a carrier containing enclosed confinement therein one or more components, wherein: a) a first component contains an omega-3 fatty acid; and b) a second component contains a therapeutic agent useful in the treatment of bipolar disorder.

21. The kit of claim 20 wherein: a) said first component contains an omega-3 fatty acid selected from the group consisting of eicosapentanoic acid and docosahexanoic acid; and b) said second component is selected from the group consisting of a source of choline and a source of lithium.

22. A kit comprising a carrier containing in close confinement therein, none or more components wherein: a) a first component contains an omega-3 phosphatidyl-choline; and b) a second component contains a therapeutic agent useful in the treatment of bipolar disorder.

23. The kit of claim 22, wherein the .alpha. carbon of said glycerol is esterified to eicosapentanoic acid and the .beta. carbon of said glycerol is a esterified to docosa-hexanoic acid.

24. The kit of claim 22, wherein the .alpha. carbon of said glycerol is esterified to docosahexanoic acid and the .beta. carbon of said glycerol is a esterified to eicosapentanoic acid

24. The kit of any one of claims 22-24, wherein said second component is selected from the group consisting of a source of choline and a source of lithium.

L6 ANSWER 3 OF 3 USPATFULL on STN
ACCESSION NUMBER: 2002:24309 USPATFULL
TITLE: Omega-3 fatty acids in the treatment of bipolar disorder
INVENTOR(S): Stoll, Andrew L., 35 Old Winter St., Lincoln, MA, United States 01773
Severus, Wolfram E., Badensche Strasse 7, D-10825 Berlin, GERMANY, FEDERAL REPUBLIC OF

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	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6344482	B1	20020205	
	WO 9739759		19971030	
APPLICATION INFO.:	US 1999-269361		19990322	(9)
	WO 1997-US6712		19970423	
			19990322	PCT 371 date

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Jarvis, William R. A.
LEGAL REPRESENTATIVE: Choate, Hall & Stewart
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 387
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention is directed to a method of treating patients with bipolar disorder by administering omega-3 fatty acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

CLM What is claimed is:

1. A method of treating a human patient for bipolar disorder, comprising administering an omega-3 fatty acid to said patient at a dosage sufficient to reduce or eliminate the symptoms of said disorder, wherein said symptoms are symptoms of mania and symptoms of **depression**
.

2. The method of claim 1, wherein said omega-3 fatty acid is administered at a dose of between about 1 and about 30 grams per day.

3. The method of claim 1, wherein said omega-3 fatty acid is in a substantially pure form.

4. The method of claim 1, wherein said omega-3 fatty acid is eicosapentanoic acid.

5. The method of claim 4, wherein said eicosapentanoic acid is administered at a dose of between about 2 and about 10 grams per day.

6. The method of claim 1, wherein said omega-3 fatty acid is docosahexanoic acid.

7. The method of claim 6, wherein said docosahexanoic acid is administered at a dose of between about 1 and about 5 grams per day.

8. The method of claim 1, further comprising administering a source of lithium to said patient at a dose sufficient to reduce or eliminate the symptoms of said disorder.

9. The method of claim 1, further comprising administering a source of choline to said patient at a dose effective at reducing or eliminating the symptoms of said disorder.